

No. 720,484.

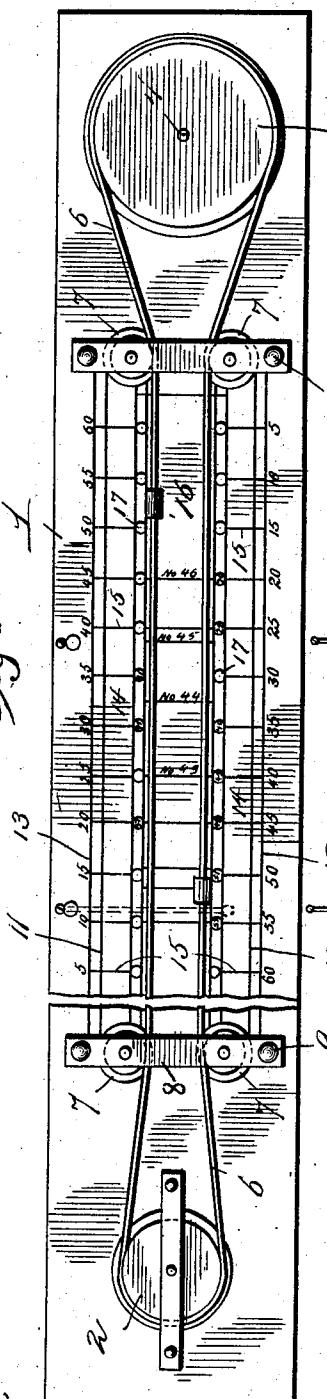
PATENTED FEB. 10, 1903.

S. A. RIGGS & T. J. HAWORTH.
TIME APPARATUS FOR CAR DESPATCHERS.

APPLICATION FILED NOV. 9, 1901.

NO MODEL.

Fig. 1.



Witnesses

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Fig. 2.

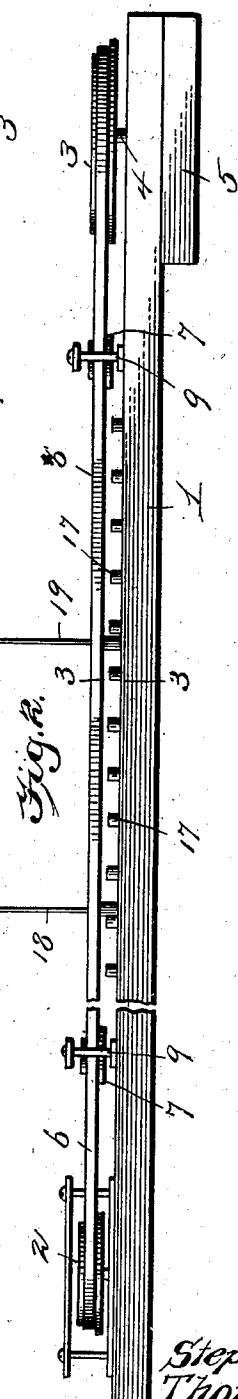
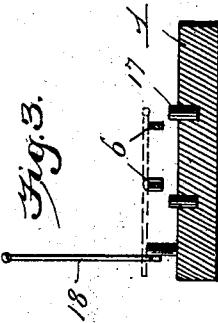


Fig. 3.



UNITED STATES PATENT OFFICE.

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TIME APPARATUS FOR CAR-DESPATCHERS.

SPECIFICATION forming part of Letters Patent No. 720,484, dated February 10, 1903.

Application filed November 9, 1901. Serial No. 81,742. (No model.)

To all whom it may concern:

Be it known that we, STEPHEN A. RIGGS and THOMAS J. HAWORTH, citizens of the United States, residing at Jonesboro, in the county of Grant and State of Indiana, have invented new and useful Improvements in Time Apparatus for Car-Despatchers, of which the following is a specification.

This invention relates to a time apparatus for car-despatchers; and the object thereof is to provide a miniature representation of a given portion of track whereby the despatcher in his office may determine at a glance the relative positions of the cars under his command.

Other objects, as well as the novel details of construction, will be clearly described hereinafter and defined in the appended claims.

In the drawings, Figure 1 represents a top plan view of a time-indicator board constructed in accordance with our invention. Fig. 2 is a side elevation of the same, and Fig. 3 is a transverse sectional view on the line 3-3 of Fig. 2.

The reference-numeral 1 designates a base or board on which are two pulleys 2 and 3 at the respective ends thereof. The shaft 4 of the pulley 3 extends down through the board 1 and is driven by a suitable motor within the casing 5, so as to drive an endless belt or cable 6, passed around the pulleys 2 and 3. The belt or cable 6 is adapted to engage a plurality of auxiliary pulleys 7, distanced apart to represent the length of road the device is designed to represent. In the drawings two lines are represented, one on either side of the belt 6; but other lines might be represented by providing additional pulleys 7 to contact with the belt 6.

One end of the journals of the pulleys 7 are supported by the board 1, while the remaining ends are secured in cross-bars 8, supported above the base 1 by suitable standards 9. The pulleys to the right carry an endless belt 10, while those to the left carry a similar one, (designated by the reference-numeral 11,) and these belts 10 and 11 run parallel to the lines 12 and 13, representing the tracks to and from the despatcher's station.

Each track-section is divided into a plurality of spaces 14 by lines 15, which are numbered from "5" to "60" or more, according to the time required for the car to make the run and return. Thus the time for a given point on one of the belts 10 and 11 to travel from one line 15 to another will require five minutes. A miniature car 16 or representation of the actual car upon the track will be fixed on the belt as the cars leave the station. The motor having been previously adjusted to drive the belts at the same rate of speed as the cars travel, the toy cars or representations will indicate the relative position of the cars at all times.

The reference-numeral 17 designates a plurality of removable pegs properly numbered to indicate the schedule time of any particular car upon the track—as, for instance, for special cars. However, these pegs may be utilized for the regular cars, if it is found desirable.

The pivoted bars (designated by the reference-numerals 18 and 19) are designed to represent gates or switches and are adapted to be thrown down in a horizontal plane across the track to stop any one of the cars 15 and retain it for a given time. These gates or switches are to provide for turnouts or sidings upon the regular line and will be brought into play in the event that one or more of the cars lie over at the siding for any purpose. Of course it will be understood that these gates or switches will have the same relative position upon the base-board 1 as will the sidings on the regular line. In the event that the succeeding car reaches the gate before the preceding one has departed the conductor or attendant will merely remove the detaining car, and by raising the gate the remaining cars may pass on uninterrupted. When the detained car on the road is again set in motion, the removed car on the time apparatus may be again attached to the belt.

Inasmuch as the belts must travel at all times, the cars will be secured to the belts by frictional contact, so as to normally travel with the same. However, immediately the gate is thrown across the path of the car the

belt will be permitted to pass on, leaving the car against the gate until it is raised to permit the car to proceed.

While we have specifically described what 5 to us appears to be the best method of accomplishing the desired result, we would have it understood that we do not desire to be limited to the specific construction hereinabove described, as we reserve the right to make 10 such alterations or changes as will fairly fall within the scope of the appended claims.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

15 1. In a device of the character described, the combination with a power-driven belt, of a series of symbols arranged adjacent the belt and designed to indicate stations, cars propelled by the belt in the path of the stations 20 and means designed to be thrown across the path of the cars for stopping them on the belt and without effecting the movement of the belt.

25 2. In a device of the character described, the combination with a power-driven belt of a base on which the belt is arranged and graduated to represent a miniature railway-track, said base being graduated to form a scale, cars carried by the belt and moving in

30 the path of the graduated scale and gates arranged at intervals along the base and designed to be thrown across the track to obstruct the cars.

35 3. In a device of the character described, the combination with a base spaced to indicate points on a road-bed, of a railway-track, of miniature cars, means for propelling the same, and hinged gates arranged on said base adapted to be thrown across said bed to retard the movement of the cars.

40 4. The combination with a base designed to represent a road-bed, a pair of pulleys thereon, an endless belt driven thereby, auxiliary belts and pulleys driven by the first-named belt, graduations on the base arranged 45 adjacent the auxiliary belts to represent road-beds, cars carried thereby adapted to follow the path of the belts and hinged gates arranged on said base and adapted to be thrown across said belt to retard the movement of 50 the cars.

45 In testimony whereof we affix our signatures in presence of two witnesses.

STEPHEN A. RIGGS.
THOMAS J. HAWORTH.

Witnesses:

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JAMES H. DUNLAP.